

**REMARKS/ARGUMENTS**

Reconsideration of this application is requested. Claims 21, 23-25 and 27-40 are in the case.

**I. THE OBVIOUSNESS REJECTION**

Claims 21-22 and 25-35 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Brant (WO 96/34020). The Action asserts that while Brant discloses a low molecular weight partially crystalline polyolefin and exemplifies ethylene polymer and propylene polymer, but not polyisobutene, it nevertheless would have been obvious to one of ordinary skill at the time the invention was made, based on Brant, to prepare an inert hydrocarbon component coated supported metallocene catalyst by using a polyolefin such as polyisobutene as the inert hydrocarbon component. The rejection is respectfully traversed.

As amended, the claimed invention is directed to a supported polymerisation catalyst system comprising the combination of (i) a porous support, (ii) a polymerisation catalyst, and (iii) a cocatalyst. The porous support is treated with an inert material prior to contact of the porous support with the other catalyst components, and in an amount of less than or equal to the pore volume of the porous support.

Brant discloses the use of an inert hydrocarbon material during the preparation of a supported metallocene catalyst system. Brant discloses (page 11) that the inert material may be added at any point during the preparation but is preferably added as the last component as shown in Examples 1 and 3. Thus, in Example 3 (Brant, page 17), the silica is slurried in a large excess of toluene before addition of the cocatalyst

methyl aluminoxane. In this example, Multiwax 195 M represents the inert material. At page 17 lines 28-29, the supported catalyst system is treated finally with the solution of the Multiwax in toluene (which represents the preferred embodiment of the invention of Brant).

In Brant (page 11, line 12 - page 12, line 6), different embodiments of the incorporation of the inert material into the supported catalyst preparation are disclosed. However, none of these discloses or suggests treatment of the support with the inert material **prior** to the addition of the other catalyst components. In all of the disclosed methods, the inert material is either added as the **last** component of the catalyst system or it is added at the **same time** as the metallocene and activator are added to the support. All of these methods are consistent with the inert material coating the catalyst system (see Brant, page 2, lines 30-31: "...it is believed that the insert hydrocarbon component acts as a coating for the catalyst system...."). This is the opposite of the presently claimed invention, wherein the inert material is added to impregnate the pores of the support **before** the other components (see page 3, lines 30- 32 of the present application).

In addition to the above differences between Brant and the presently claimed invention, Brant contains no specific disclosure or suggestion of polyisobutene (PIB) (the present elected species) as suitable as the inert material. The Action acknowledges that Brant does not disclose polyisobutene species but then asserts that "...one would immediately envision the low molecular weight olefin polymer to be other simplest polyolefins such as poly(butene-1), polyisobutene, poly(pentene-1), etc." In response, if PIB was the "simplest" polyolefin, it would have been expected that Brant

would disclose this as being suitable for use in his invention. There is no such disclosure.

Claim 21 as amended also requires that the porous support is treated with an inert material in an amount of less than or equal to the pore volume of the porous support. Brant contains no disclosure or suggestion of adding the inert material in an amount of less than or equal to the pore volume of the porous support. In addition, although Brant discloses that the inert material may be added at any point during the preparation of the catalysts, there is no disclosure of addition "prior to the addition of the other catalyst components" as now required by amended claim 21. Both of these important features of amended claim 21 are absent from and not suggested by Brant, as well as the absence of any disclosure in Brant of polyisobutene.

For the above reasons, there would have been no motivation for one of ordinary skill to arrive at the presently claimed invention based on Brant. Absent any such motivation, a *prima facie* case of obviousness has not been generated in this case. Withdrawal of the obviousness rejection is respectfully requested.

## II. CLAIM AMENDMENTS

Claim 21 has been amended to incorporate the subject matter of claims 22 and 26. Claims 22 and 26 have been canceled without prejudice. The claims have also been amended to remove the European-style "characterized in that " language and to correct grammatical errors. No new matter is entered.

JACOBSEN et al  
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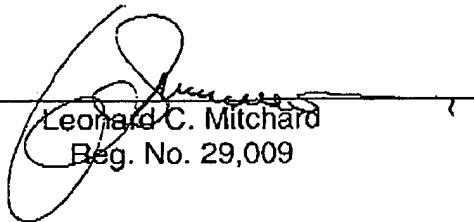
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Favorable action is awaited.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By: \_\_\_\_\_

  
Leonard C. Mitchard  
Reg. No. 29,009

LCM:lff  
901 North Glebe Road, 11th Floor  
Arlington, VA 22203-1808  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100